

# UK COOPERATIVE EXTENSION SERVICE

UNIVERSITY OF KENTUCKY — COLLEGE OF AGRICULTURE

## Ornamental Corn

### Introduction

Ornamental corn production currently represents a new crop for Kentucky, with limited grower experience and University of Kentucky research. There are many kinds of ornamental corn, varying in ear size, kernel color, husk and stalk color. Some cultivars have red or purple stalks and leaves that are sold for decorative purposes.

### Marketing

Potential markets for ornamental corn include farmers' markets and roadside stands. Local retail markets, such as supermarkets, are also an option. In addition, stores that specialize in decorative and craft items may present options for wholesale buyers. Some producers have discovered an opportunity delivering and setting up fall yard displays using corn and other fall ornamentals.

### Market Outlook

Markets for ornamental crops continue to stay strong, especially in greater population areas. Fall decorations now rank just behind Christmas decorations in dollars, with the average American household spending about \$50 annually on fall decorations.

A benefit to growing a non-edible crop is that the food safety concerns associated with food crops is greatly reduced. Ornamental crops can also extend a specialty crop producer's cash flow in the late fall months. As with any other specialty crop, however, producers should have a place to market their ornamental crop before beginning production.

### Production Considerations

#### *Site selection and planting*

A well-drained soil is essential to achieve high quality ears of ornamental corn. A good seedbed is necessary for successful seed germination and a good plant start.

Fields that have been in fescue sod are ideal for ornamental corn production. The field should be plowed several weeks before planting and then disked three to four times. If no-till production is planned, a non-selective herbicide should be applied prior to planting.

To mature in time for a mid-September harvest, plantings should be made between May 15 and May 25. Plant enough seed to produce a plant population of 18,000 to 22,000 stalks per acre for large-eared ornamental corn varieties. The small-eared selections could be grown at populations of 24,000 to 26,000 stalks per acre.

Ornamental corn will freely cross-pollinate with other types of corn, such as field and sweet corn, making isolation necessary. Isolation from other corn varieties can be accomplished by a physical separation of 250 or more feet or by making sure there is a minimum of 14 days difference in the maturities of the different types. Ornamental corn cultivars recommended for Kentucky are listed in the Sweet Corn section of the *UK Vegetable Production Guide for Commercial Growers* (ID-36). Ornamental corn



research trial results are published in the *UK Fruit and Vegetable Crops Research Reports*.

#### *Pest management*

Corn earworm is one of the most destructive insects attacking corn. Other insect pests that can cause crop damage include corn borer, armyworm, Japanese beetles and flea beetles. Using insect traps or scouting to monitor populations can help the grower determine when and how often insecticides should be applied. Potential disease problems include Stewart's wilt, leaf blights, rust and viruses. Stalk rot diseases which cause lodging can be a serious problem, especially in some of the older non-hybrid cultivars. Crop rotation and the use of resistant varieties can help control these diseases. Weed control can be achieved by a good crop rotation program and the use of herbicides. Deer, groundhogs, raccoons and birds can also cause crop losses.

#### *Harvest and storage*

Ornamental corn must be harvested by hand when the husk is dry. When the ears have lost their green color and begin to dry down, they have reached full maturity. To harvest, ears are broken off with a quick downward motion. The husk is left on the ear at harvest time. After a week of drying, ears can be used for ornamental purposes. They are usually sold in groups of three held together with rubber bands or a plastic florist's sleeve.

#### *Labor requirements*

Labor needs per acre are approximately 20 hours for production and 85 to 95 hours for harvesting, packing and grading.

## **Economic Considerations**

Initial investments include land preparation, purchase of seed, and installation of an irrigation system. Production costs (2006) for ornamental corn are estimated at \$360 per acre, with harvest and marketing costs at \$990 per acre. Total expenses per acre come to about \$1,550. Presuming gross returns of \$2,600 per acre, returns to land, capital and management would be approximately \$1,050 per acre. These returns assume corn is boxed for wholesale. Additional time spent tying and bundling ears for direct markets may increase labor costs and reduce returns.

## **More Information**

- A Comprehensive Guide to Corn Management in Kentucky, ID-139 (University of Kentucky, 2001)  
<http://www.ca.uky.edu/agc/pubs/id/id139/id139.htm>
- Fruit and Vegetable Crops Research Reports (University of Kentucky)  
<http://www.uky.edu/Ag/NewCrops/othercrops.html#v>
- Kentucky Integrated Crop Management Manual for Corn (University of Kentucky, 1997)  
<http://www.uky.edu/Ag/IPM/manuals/ipm2corn.pdf>
- Ornamental Corn Production in Kentucky, HO-81 (University of Kentucky, 1998)  
<http://www.ca.uky.edu/agc/pubs/ho/ho81/ho81.htm>
- Vegetable Production Guide for Commercial Growers, ID-36 (University of Kentucky)  
<http://www.ca.uky.edu/agc/pubs/id/id36/id36.htm>